

# **LASER DEFLECTION**



05/03/2015

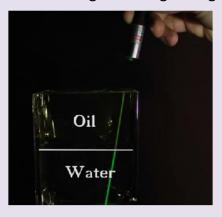
# **YOU NEED:**

- A glass
- Some olive or corn oil
- A green laser
- Water

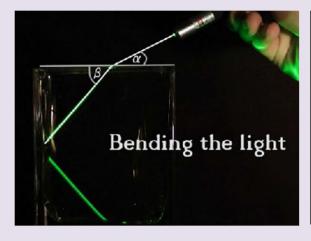
# **PROCEEDING**:

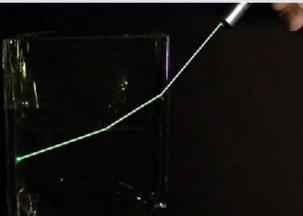
Fill the glass with half water before and then kindly with half oil. Turn off the lights.

Start pointing the laser with different angles through the glass.



When specific angles are reached, it is possible to see a sensible deflection of the laser beam.







# LASER DEFLECTION



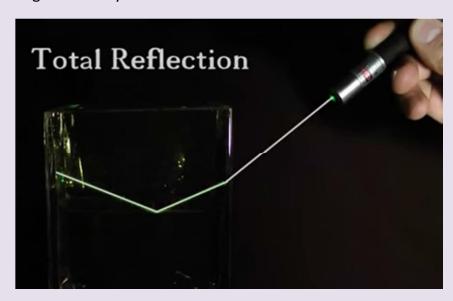
05/03/2015

#### WHY DOES IT HAPPEN?

Here it is a simple demonstration of a phenomenon called light reflection: when pointed through a certain fluid, a beam gets a deflection that can be evaluated through some physical laws.

Different fluids have different reflection indexes and mechanisms, so light results deflected when passing from water to oil.

Reached a critical angle, it is possible to observe a total reflection, so that light does not pass through the oil layer.



Try your own biphasic system to deflect the laser beam!

# **Credits**

http://www.youtube.com/watch?v=HHXqyZrdACs